

PATENT SPECIFICATION

633,312

No. 5335/48.



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PROVISIONAL SPECIFICATION

Improvements in or relating to Bedsteads

We, WHITFIELDS BEDSTEADS LIMITED, a Company organised under the Laws of Great Britain and Northern Ireland, of 109—125, Watery Lane, Birmingham, 9, and SAMUEL LAING WHITFIELD, a British Subject, of 12, Dane Street, High Holborn, London, W.C.1, do hereby declare the nature of this invention to be as follows:—

10 This invention relates to bedsteads of the kind capable of being supported alternatively on feet which prevent any accidental displacement of the bedstead or on one or more castors or wheels which 15 enable the bedstead to be moved from place to place, operating means being provided for bringing the said castors or feet into or out of contact with the floor.

A bedstead of the kind described is 20 closed in the Specification of Letters Patent No. 516,372 wherein the operating mechanism comprises a worm adapted to engage and operate a toothed member in turn actuating one or more connecting 25 links by means of which movement is imparted to the said castors or feet.

With the aforesaid construction the worm is operated by a handle disposed centrally of the foot of the bed, the casing 30 housing the operating mechanism being disposed immediately above the castor which is arranged midway between the two fixed feet at the foot of the bed.

It is not always convenient to mount 35 the operating handle centrally at the foot of the bed although eminently suitable for positioning the actuating mechanism and the object of the present invention is to provide mechanism capable of being 40 operated from the side of the bed and preferably adjacent the head thereof.

It will be appreciated that mechanism 45 at the foot of the bed projects to a certain extent and it may be convenient for this reason and more suitable to place the mechanism at the head of the bed and to the side thereof, and that, further it is often more useful for operative and nursing work to steady the head-end of the

bedstead rather than the foot-end. 50

According to the present invention, a bedstead of the kind described is characterised in that the worm is actuated by means operated at a point remote from the centre of the head or foot of the bedstead. Conveniently the worm is operated by a shaft rotatable at a point adjacent to the side of the head or foot of the bedstead, one end of the shaft being mounted in a bearing secured to one of 55 the side pillars or legs of the bedstead.

Preferably the shaft is mounted in a bearing-bracket displaced inwardly from the said pillar or leg and universal joints may be arranged at each end of the shaft. 60

One preferred construction according to the invention comprises a casing containing the operating mechanism as described in the aforesaid Specification No. 516,372 mounted centrally of the head of the bed 70 and between the legs thereof with the castor below as hitherto, but with the casing turned through about 180 degrees in the horizontal plane. The worm is operated by a shaft extending from the 75 gear casing to the side of the bed pillar at the head and rotated by a handle which may be removable if required. Such an arrangement is permissible where clearance is provided between the head of the bed and the backing wall to permit the handle to be rotated. Where such clearance is not available the aforesaid shaft is arranged diagonally with respect to the head of the bed and connected to the 80 worm by a universal joint. The other end of the shaft is connected by universal joint to a short shaft mounted in bearings secured to a lug or bracket welded to the side pillar of the head of the bed and 85 directed towards the foot. Such bracket may comprise a short length of square tube welded in place and extending horizontally parallel with the side of the bed and carrying at its extremity a bearing for the short shaft one end of the latter being fitted with a handle and the 90 other end having universal joint connec-

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[Price 2/-]

tion with the primary shaft driving the worm.

Alternatively, where such clearance is not available, the casing may be so placed 5 that the shaft emerges at a slight angle and is connected to the short shaft by

means of one universal joint only.

Dated this 23rd day of February, 1948.

MEWBURN, ELLIS & CO.,
70/72, Chancery Lane, London, W.C.2,
Chartered Patent Agents.

COMPLETE SPECIFICATION

Improvements in or relating to Bedsteads

We, WHITFIELDS BEDSTEADS LIMITED, a Company organised under the Laws of 10 Great Britain and Northern Ireland, of 109-125, Watery Lane, Birmingham, 9, and SAMUEL LAING WHITFIELD, a British Subject, of 12, Dane Street, High Holborn, London, W.C.1, do hereby 15 declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

20 This invention relates to bedsteads of the kind capable of being supported alternatively on feet which prevent any accidental displacement of the bedstead or on one or more castors or wheels which 25 enable the bedstead to be moved from place to place, worm operated means being provided for bringing the said castors or feet into or out of contact with the floor.

30 A bedstead of the kind described is disclosed in the Specification of Letters Patent No. 516,372 wherein the operating mechanism comprises a worm adapted 35 to engage and operate a toothed member in turn actuating one or more connecting links by means of which movement is imparted to the said castors or feet.

With the aforesaid construction the worm is operated by a handle disposed 40 centrally of the foot of the bed, the casing housing the operating mechanism being disposed immediately above the castor which is arranged midway between the two fixed feet at the foot of the bed.

45 It is not always convenient to mount the operating handle centrally at the foot of the bed although eminently suitable for positioning the actuating mechanism and the object of the present invention 50 is to provide mechanism capable of being operated from the side of the bed and preferably adjacent the head thereof.

55 It will be appreciated that mechanism at the foot of the bed projects to a certain extent and it may be convenient for this reason and more suitable to place the mechanism at the head of the bed and to the side thereof, and that, further it is often more useful for operative and nursing work to steady the head-end of the 60 bedstead rather than the foot-end.

According to the present invention, a bedstead of the kind described is characterised in that the worm is actuated by means mounted on one of the legs of the 65 bedstead i.e. at a point remote from the centre of the head or foot of the bedstead. Conveniently the worm is operated by a shaft rotatable at a point adjacent to the side of the head or foot of the bedstead, 70 one end of the shaft being mounted in a bearing secured to one of the side pillars or legs of the bedstead.

75 Preferably the shaft is mounted in a bearing-bracket displaced inwardly from the said pillar or leg and universal joints may be arranged at each end of the shaft.

In order that the invention may be clearly understood, and readily carried into effect, reference is directed to the 80 accompanying drawing, wherein:—

85 Figure 1 is a perspective view of the head part of a bedstead having worm operated mechanism in accordance with the invention.

Figure 2 is a plan view of mechanism according to the invention.

80 The preferred construction according to the invention illustrated in the drawing comprises a casing A containing the operating mechanism as described in the aforesaid Specification No. 516,372 mounted centrally at the head of the bed B, and between the legs C, C thereof with the castor D below as hitherto, but with 90 the casing A turned through about 90 degrees in the horizontal plane. The worm of the operating mechanism is operated by a shaft E extending from the gear casing A to one side of the bed leg at the 100 head in this instance and rotated by a handle F which may be removable if required. Such an arrangement is permissible where clearance is provided between the head of the bed and the back- 105 ing wall to permit the handle to be rotated. Where such clearance is not available the aforesaid shaft E is arranged diagonally (see more particularly Figure 2) with respect to the head 110 of the bed B and connected by universal joint to a short shaft G mounted in bearings H secured to a lug or bracket J welded to the side pillar of the head of the bed or the leg C and directed towards 115

the foot. Such bracket J may comprise a short length of square tube welded in place and extending horizontally parallel with the side of the bed and carrying at its extremity the bearing H for the short shaft G one end of the latter being fitted with the handle F and the other end having a direct connection or a universal joint connection with the worm drive.

10 Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

15 1. A bedstead of the kind described characterised in that the worm is actuated by means mounted on one of the legs of the bedstead.

2. A bedstead as claimed in claim 1,

wherein the worm is operated by a shaft 20 rotatable at a point adjacent to the side of the head or foot of the bedstead, one end of the shaft being mounted in a bearing secured to one of the legs of the bedstead.

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3. A bedstead as claimed in claim 2 wherein the shaft is mounted in a bearing-bracket displaced inwardly from the said leg and universal joints are arranged at either or both ends of the shaft.

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4. The improved bedstead substantially as herein described with reference to the accompanying drawings.

Dated this 21st day of March, 1949.

MEWBURN, ELLIS & CO.,
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Chartered Patent Agents.

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Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which
copies, price 2s. 0d. each (inland) 2s. 1d. (abroad) may be obtained.

[This Drawing is a reproduction of the Original on a reduced scale.]

